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INDUSTRIAL CAUSES AFFECTING AMERICAN COMMERCIAL POLICY SINCE CIVIL WAR

The public is familiar with the statement that the present tariff policy of the United States is a legacy of the Civil War; that the high protective schedules now in use are substantially the same as those then adopted; and further, that these schedules, put into operation, as they were, to meet a great fiscal emergency, have been continued ever since that emergency passed, without either fiscal or economic justification. In the discussion which follows, only the last of these points is to be considered, viz.: the economic or industrial causes for the continuance of the high tariff schedules imposed during the Civil War. Or, since the tariff policy is only a part of a larger theme which is both fiscal and commercial, it is desired to approach this larger theme from the commercial side, as stated in the title of this paper. Stated more fully, the question proposed for investigation is as follows: What are the industrial or economic causes which have influenced, or which, from the nature of the case, should have influenced, the commercial policy of the United States during the last half century—a policy whose most characteristic expression is to be found in its tariff schedule?

The commercial policy of the United States, throughout the greater part of its history, may be summarized as a fostering of the *home market* and a comparative indifference toward the foreign. Why this has been so is a matter of common information. It was inevitable from the beginning that a country resourceful in raw materials would not long continue to ship those materials across an ocean 3,000 miles away, and back again, before they could be consumed as merchantable goods. Sooner or later the factories were bound to migrate to this side of the Atlantic, just as they are still migrating within the country whenever called to do so by the demands of the market. Naturally enough, political aid was summoned to *hasten* this immigration, and thus the commercial policy was established which still continues.

The elements of a market, then, may be stated as: First, a community producing raw materials; second, a community which

changes these into finished products—both of which are in turn consumers of these products; and third, the minimum cost of transportation between them. The natural tendency, other things being the same, is for the second element to seek the first and thus to continually reduce the third. As long as these are not threatened with over-production the foreign market is a matter of indifference. Therefore, as long as the American producer, whether of raw materials or of manufactured products, can find a market for his wares at home, it is evident that the fostering of the home market, even at the expense of the foreign, is wise commercial policy, provided that the fostering doesn't cost too much. So far as to the commercial policy.

The Civil War marks the beginning, for the United States at least, of an industrial revolution second only in importance to the Industrial Revolution in England which preceded it just one hundred years. The earlier revolution has been characterized in its first phase as the triumph of the machine over hand tools in production, the growth of the factory system; the second phase as the triumph of the machine in transportation, the growth of the railway system. The later industrial revolution has been characterized as the triumph of the machine in business organization and management—the corporation; but this fails to take note of other industrial changes of the same epoch which do not fall within that category.

There are two principal changes which are associated with this epoch, although they have no causal connection with the Civil War; namely, the development of the Middle West, the great food-producing section, and the development of the means of transportation from this to the manufacturing centers. A third principal result, growing out of the Civil War, was the abolition of slave labor in the South. Around these three changes may be grouped by far the greater part of those industrial causes which have influenced our commercial policy since that time. Let us notice them somewhat in detail.

The development of the Middle West had been going on for several decades. The migration of population from eastern State to western was but little affected by the great struggle of the sixties, and the soldiers' claims and homestead acts drew many a family into unsettled regions immediately after its close, so that

by 1870, more than the normal increase of population per square mile is recorded for that decade.

Again, the war called the able-bodied men to the front. Who were left to take care of the fields? The scarcity of labor must inevitably have called women into the field, had not invention come to the rescue. It will be remembered that it was just at this time so many improvements were made in farming machinery, the improved plow, the corn-planter, grain drill, cultivator, and greatest of all in its labor-saving power, the reaper and mower. With the disbanding of the army, the opening up of new lands, and with the placing of improved machinery into the hands of competent men, the production of cereals and other crops was vastly augmented. It is not too much to say that a farmer of the present day, by means of his modern machinery and implements, can manage from three to six times as many acres as he did in the days of the reap-hook, scythe and flail. This means the augmentation of production in the same ratio. The significance of these statements is seen in the following table from the United States Census Report of 1900 (Vol. VI, p. 23):

Total Production of Corn in Bushels, and Increase, and Per Cent of Increase, by Decades—Summary, 1850-1900.

Census Year.	Total Production.	Increase in Decade.	Per Cent of Increase.
1900	2,666,440,279	544,112,732	25.6
1890	2,122,327,547	367,735,871	21.0
1880	1,754,591,676	993,647,127	130.6
1870	760,944,549	177,848,193	19.3
1860	838,792,742	246,721,638	41.7
1850	592,071,104

Thus it appears that corn, the most valuable of the cereal crops, and the most characteristic of our best agricultural region, increased in production in the decade preceding the war 41.7 per cent, suffered a decrease of 9.3 per cent during the war, and from '70 to '80 made the enormous gain of 130.6 per cent. The decrease of 9.3 per cent during the war is surprisingly small when the amount of labor necessary for its culture is taken into consid-

¹ Decrease.

eration, and this fact together with the increase of the following decade shows what strides were being made just at this time in the settlement of the country and the invention of machinery for increasing production. It might seem, from the commercial viewpoint, that the agricultural products are relatively of much less importance than the mineral, since the railway ton mileage of the latter was 52.59 per cent of one year's traffic, while during the same year the ton mileage of agricultural products amounted to only 13.22 per cent for the whole country. But ton-mileage, it need hardly be said, does not express value, and is therefore no index of the relative commercial importance of commodities.

It will be assumed that enough has been said to show that the production of raw materials, which was necessarily retarded during the Civil War, went forward thereafter with an acceleration which was due to something more than the temporary stoppage occasioned by the war. Increased production, however, results simply in the reduction of prices, unless the surplus product can find a larger market. To find a larger market it is necessary that the cost of transportation be low enough. Before the days of railroads nothing but a limited market was possible. With them came the possibility of reaching a world market and good prices. Now, what were the transportation facilities prior to and immediately succeeding the Civil War?

In 1830 there were 23 miles of railway in the United States.

1840	2,818	1880	93,296
1850	9,021	1890	163,597
1860	30,635	1900	193,346
1870	59,914		

The comparatively slow progress from 1840 to 1850 was followed by a very rapid increase in mileage in the next decade, due, in part, to the discovery of gold in California. Again, with the close of the war and the largely increased agricultural production, there followed another period of a rapid increase of mileage from 1867 to 1873, an increase which was largely responsible for the business depression that followed.² By this time the main lines of railway had been laid down and the thoroughfares of traffic established.

But the freight rates were still too high to allow low-grade freight to travel far to market. It was about at this juncture,

² See "American Railway Transportation," p. 27, E. R. Johnson.

early in the seventies, that another great advance was made in railway improvement, second in importance, perhaps, only to the invention of the locomotive itself. This was the substitution of the steel for the iron rail, made possible both by the perfection of the process of manufacture and by lowering the cost of production. The significance of this improvement is that it permits the indefinite increase of the train load, so far as the track is concerned, whereas the iron rail would bear but a limited burden. The increase in the train load means a vast saving in the cost of transportation, since it decreases the relative proportion of dead freight. Hence the decline in average freight earnings from \$1.77 per ton mile in 1872 to \$1.10 in 1882, and to 72.9 cents in 1900, has enormously increased the world's commerce by making it possible for the traffic to move. In 1868 it cost 30.49 cents to send a bushel of wheat from Chicago to New York by the "all rail" route, ten years later 17.56 cents, ten years later 14.5 cents, and in 1898 11.55 cents.

Let us dwell for a moment upon the significance of these two events, which, in their approximate coincidence, are enough in themselves to mark an industrial transition of revolutionary importance. On the one hand, a vast region of unsurpassed resources, the population a nation not only of good producers, but of large consumers as well, having the tastes and desires that go with a high standard of living, and the means to gratify them. On the other hand, the railway, regarded originally as a mere handmaid to canal transportation, outrun at first by the population, it may be said to have caught up with it and passed it eventually, stretching clear across the continent, with the Civil War about central in point of time to the period of its greatest achievements. Then again, emerging from the Civil War, the network of railways still incomplete, the steel rail makes its appearance in the early seventies, freight rates decline in spite of pools and agreements, and the impetus given to commerce is mighty.

The lowering of transportation to the seaboard, in fact, had several important results. In the first place the Western farmer could now raise grain for the European market to an unprecedented extent. Thus in 1867 only about $8\frac{1}{3}$ per cent of the entire wheat crop was exported. This increased to over 20 per cent in 1870 and over 40 per cent in 1880. Another

important result was that with a large amount of inland produce thus laid down at our seaports—just the kind of commodities that Europe most wanted—a large ocean trade was inevitable. This in turn, reacting upon the ocean carrying trade, was influential, together with the opening of the Suez Canal in 1869, in the further improvement of ocean transportation, and the further reduction of freight rates. This improvement is seen in the substitution of steam for sailing vessels, the improvement of the marine engine, the consequent shortening of the time and expense of transit, and the establishment of numerous additional transatlantic liners. A third result, consequent upon the foregoing and more immediate in its bearing upon this investigation, was that the cheapening of land and ocean transportation gave foreign goods a much easier access to our markets. Moreover, since the home demand for raw products could by no means keep pace with production, the sale of our raw products in foreign markets created a counter-demand for foreign goods. With a low tariff, such as preceded the Civil War, there is no question as to what would have become of the home market. Undoubtedly the continuance of the high tariff schedules alone saved it to the home manufacturer. Here, then, we have a series of industrial causes which were influential in continuing the high schedules previously adopted on fiscal grounds. It is evident at the same time that the fostering of the home market had comparatively little interest for the producers of raw materials, whose surplus commodities must needs find a foreign market. They might well ask themselves whether or not they were paying too high a price for it.

Among the producers of raw materials the people of the South are no less to be mentioned than those of the West. Natural conditions would have made the commercial interests of the two sections identical, but slavery changed it all. Because of slavery, immigration passed by to the North and West. For the same reason the white population of the South, which was not too poor to migrate, or not too well established to care to, was also moving to a territory of free competition in labor. Manufacturing and other diversified industries could not flourish in a society based on slavery. With the freeing of the slaves the South found herself almost destitute of white laborers, for whom the freed blacks were by no means an economic equivalent. An industrial as well as

a political reconstruction was needed. The slow recovery from the devastation and chaos resulting from the war is evidenced by the fact that the cotton crop, the most representative of Southern industries, did not reach the figures for 1860 for nearly twenty years thereafter.

It has been shown above that with the development of the Middle West and the lowering of the cost of transportation, the surplus product found a foreign market, and the relative importance of the home market to the Western farmer declined. With the Southern farmer the same was true in a much greater degree. The foreign demand for cotton has usually taken from 60 to 75 per cent of the entire crop. Likewise the foreign demand for tobacco is greater than the home demand. Thus, if the Western farmer had reason to question the expediency of fostering the home market any longer, the Southern farmer had much more. Evidently, the defense of the home market had to be shifted entirely upon the manufacturing industries.

"The growth of the manufacturing industries of the United States since 1860," to quote from a well-known³ writer, "has been so extensive and varied that it is difficult to select the industry, or group of industries, that forms the most striking feature of the period." The census for 1900 gives the capital employed in manufacture as follows:

		Per Cent of Increase from	
1850	\$533,245,351	1850 to 1860	89.4
1860	1,009,855,715	1860 to 1870	109.8
1870	2,118,208,769	1870 to 1880	31.7
1880	2,790,272,606	1880 to 1890	133.9
1890	6,525,156,486	1890 to 1900	50.7
1900	9,835,086,909		

Thus the amount of capital invested in manufacturing increased ninefold in the last forty years of the century. Manufactured products likewise show a continuous, though by no means uniform increase, viz.:

1850 to 1860	85.1 per cent.
1860 to 1870	124.4 " "
1870 to 1880	26.9 " "
1880 to 1890	74.5 " "
1890 to 1900	38.9 " "

³Carroll D. Wright, "Industrial Evolution of the United States," p. 159.

A comparison of the agricultural and the manufacturing interests in the matter of magnitude shows that the total value of all farm property in 1900 was more than twice as great as the total amount of capital invested in manufacturing. In the relative growth of the two classes of industry the range of per cents for the successive decades is higher for manufacturing than for agriculture, showing that the former may be expected to surpass the latter in the not distant future in the amount of capital it represents. Compared as to the relative value of exports, manufacturing again shows an almost constant percentage increase over those of all the extractive industries, including agriculture, mining, forestry, fisheries, and miscellaneous; *e. g.*:

	Extractive Industries.	Manufacturing Industries.
1860.....	87.24	12.76
1870.....	85.	15.
1880.....	87.52	12.48
1890.....	82.13	17.87
1900.....	68.35	31.65

Thus the ratio of exports of manufactured to unmanufactured products has gone up from about one-eighth in 1850 to nearly one-third in 1900, the last decade showing an increase more than twice greater than any preceding.

The shifting of industries within the United States is another cause which is likely to affect our commercial policy. The center of manufacturing has advanced steadily westward from a point a little east of the center of Pennsylvania in 1850 to a corresponding point near the center of Ohio in 1900. The progress has been by no means uniform, but in the last half century it has gained upon the advancing center of population, and at the present rate it bids fair, in time, to overtake it. Now how is this likely to affect our commercial policy? It would be rash to predict; but it is evident that the sectional support of the policy of protection is liable to be considerably affected. Whether the Eastern manufacturer will still find protection advantageous to his interests will depend largely upon whether the Western manufacturer is a stronger rival than the foreigner, or otherwise. On the contrary, both the Western farmer and the Western manufacturer can better afford to be indifferent upon the subject, the main consideration

being the finding of a market on favorable terms: for manufacture as well as protection will ultimately be carried on at the greatest advantage in the West, because of the reduction of the cost of transportation to a minimum. This will apply, at least, to the manufactures of the products of that section.

Similar to this is the beginning during the last twenty years of the migration of cotton manufacturing toward the South. The immediate effect of this movement is to create a local demand for the protection of that group of industries, a demand, however, which is not likely to make itself heard politically because it is coupled politically with the question of race dominance. The ultimate effect, should the movement continue, will probably be to lessen this initial demand, since the supply of cotton fabrics will far exceed the needs of the home market.

The relative increase of the manufacturing over the extractive industries, as shown in the capital invested as well as in the products exported, may be regarded by some as a cause and by others as a result of our commercial policy. More likely it is something of both. Still more likely is it that the manufacturing interests would have increased more rapidly than the extractive, either with or without the stimulus of Federal aid in the shape of a tariff. However, it is hardly to be doubted that our commercial policy has hastened the development of manufactures, granting that it has done no more. The degree to which it has hastened them, the economic gain by so doing, the cost of the hastening process, and the ultimate expediency of it all, are topics which call for a descent into detail, a careful study of specific industries and a compilation of results such as lies beyond the bounds of our present inquiry. Moreover, it is not the *results* of our commercial policy, but its *causes*, that especially concern us.

The industrial causes which have influenced our commercial policy since the Civil War have been pointed out (with the greatest brevity) under the heads of production, transportation, manufacture and the shifting of industries. Another cause, of growing importance, remains to be noticed, namely: the great development of the corporation in the United States.

The corporation is not a new creature. In point of magnitude and importance, however, its large growth in this country but little antedates the seventies. Up to that date the question with

the people was how to get railroads built; with the railroads the question was how to control the territory. The answer to both was the development of the corporation. The success of the corporation in railway management led to its spread over the whole industrial field, except such industries as are necessarily local.

Now the significance of the great development of the corporation in America to our commercial policy is apparent in several ways: First, as affecting prices, both by means of the economy of large-scale production, and by means of monopoly control of prices; and second, as affecting our ability to compete in the foreign market and the counter-effect of this competition in the shape of retaliatory legislation. With regard to our ability to compete in the foreign market in manufactured products the facts have already been pointed out. It needs to be added that this growth of manufactured exports has been coincident with the spread of American corporate enterprises. Of the four hundred million dollars received for exports of such goods in 1900, more than one-fourth was for "iron and steel and manufactures of, not including ore"—an increase of over 377 per cent during the decade—and more than one-half was for steel, mineral oil, copper and leather in the order named, all now controlled by corporations, and mostly developed by corporations. It is idle in accounting for this to neglect the fact of corporate production as a prime element in American commercial expansion. It is this power of the corporation in commerce and industry no less than the ingenuity and skill of the workman that has aroused the apprehensions of other countries. Moreover, the corporation has not yet reached the limit of its powers. What it has done in the association under one control of a whole group of related industries it may yet accomplish in international trade.

The principal outcome of the development of the large corporation as affecting our commercial policy is the demonstration of the fact that we have reached the point where the home market must yield something to the demands of the foreign market; or, in other words, when protective duties should be removed or reduced, whenever we may thereby gain access to other markets, or, by the same act, destroy monopoly control of price in the home market. The utility of protection as a part of our commercial policy in hastening the establishment of industries may be readily granted, provided, as was said before, that it does not cost too

much. But that utility has certainly ceased when the protected industry is able to say what the price shall be in the home market. It was wise commercial policy that dictated the protection of steel rails, and thus hastened the establishment of their manufacture here, the consequent cheapening of transportation and the great advancement of the country. It involves no surrender of the principle of protection, and but manifests a judicious employment of the policy, to refuse it whenever the commodity is sold at a lower price in a foreign market than at home.

Such, then, are the industrial causes in the main, which have influenced the commercial policy of the United States since the Civil War, or which, in the case of the corporation, may reasonably be expected to influence it fundamentally. To prove a causal connection it would be necessary to refer to the reports of the various Ways and Means committees, the testimony heard before them and the reports of the special commissions to investigate the tariff. So far as any causal relation may be discovered as existing between an industrial phenomenon and a commercial phenomenon as reflected in the tariff policy, it may be rather hazardous to assume that such relation was recognized and acted upon by those responsible for our tariff policy. But those who speak of "purely political motives" as responsible for the continuance of the war tariff should remember that back of every political motive is usually to be found an economic or industrial cause, and that as a consequence it is no condemnation of the tariff policy of the last forty years to say that it rests upon "political justification." It is getting much nearer the center of the discussion to assume the industrial causes as antecedent to the political, and to inquire how far these were local and how far national in their bearing. An investigation of the material presented by and before the Committee of Ways and Means makes clear one fact in particular: namely, that local causes and interests predominate and that national interests are approximated by the most judicious harmonizing of local interests that it is possible to bring about. It is easy to criticise such a method, but this does not condemn the purpose, and the injustice which has inevitably resulted is traceable to the crudity of the political machinery rather than to the policy attempted. The time is ripe for another tariff commission similar to that of 1882.

To sum up what has been said, the main conclusions are as follows: 1. The Civil War was a period of industrial revolution, the chief events of which were the development of the Middle West, the improvement of transportation, and the abolition of slave labor.

2. These causes made it impossible to hold the home market for the home manufacturer except by means of a high tariff. Granting the desirability of doing so, the high revenue tariff was wisely retained on commercial grounds.

3. The shifting of industries within the United States does not lead to a belief in the permanence of the policy of protecting the home market, except as against counter tariff regulations.

4. The phenomenal development of the large corporation in the United States has introduced economies in production that should obviate the necessity for protection except so far as may be necessary to meet counter-propositions from other countries. In other words, production has so far outrun consumption, both for the farmer and the manufacturer, that each needs a larger market than the whole country is able to give.

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